

DEPARTMENT OF EDUCATION PO Box 500 Trenton, NJ 08625-0500

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Governor

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Commissioner

January 8, 2007

TO:

**Chief School Administrators** 

**Charter School Lead Persons** 

FROM:

Lucille E. Davy

Commissioner

SUBJECT:

Measuring Student Achievement in High School Science

I am writing to update you about the department's plans for measuring student achievement in high school science, both in the immediate future and in the longer term.

As you know, all states are required by the No Child Left Behind Act of 2001 (NCLB) to implement science assessments at three benchmark grade levels, including high school, by 2007-2008. Toward this end, the first operational administration of New Jersey's High School Proficiency Assessment (HSPA) in science is scheduled for March 2007. The implementation of the HSPA science component represents the final installment of New Jersey's response to the core NCLB mandates for expanded statewide testing. The HSPA science test will be administered to all first-time eleventh graders in March 2007, and HSPA science scores will be released in early summer 2007.

However, we believe that New Jersey's assessments must serve a purpose greater than simply meeting federal compliance requirements. As with all of our statewide tests, New Jersey's science assessments must help ensure that students are prepared to compete for post-secondary educational opportunities and careers in a highly demanding global economy. Our science assessments in particular must provide an authentic link to that world by embodying and measuring the science skills that students must master to succeed in college courses and in their careers, as they compete for those opportunities against highly trained and highly motivated students from throughout the world.

More so than language arts and other content areas, mathematics and the sciences demand discipline-specific instruction and assessment. Increasingly, states such as those involved in the American Diploma Project (ADP) consortium, of which New Jersey is a member, are deciding to implement end of course measures in science aligned to specific

proficiencies in biology, physics, chemistry, and environmental science. ADP is also recommending that states consider such end of course assessments in the mathematics disciplines. Several states, such as Maryland and Indiana, already have such assessments in place.

In consultation with our partners in the 25-state ADP consortium and following more recent discussions in December 2006 with an advisory panel of New Jersey science educators and stakeholders, the New Jersey Department of Education will be moving to end of course science assessments, starting with biology in 2008. This direction will entail not merely a redesign of science testing specifications, but recommendations to the State Board for establishing specific course requirements in high school science, including a requirement that all students take biology. Other course requirements may be prescribed as well.

Let me explain what this means for the Spring 2007 HSPA science test and for our transition toward an end of course model for assessing student achievement in high school science in 2008:

- The HSPA science test will be administered in March 2007 and scores reported in early summer 2007, in compliance with NCLB mandates;
- The 2007 HSPA science data will give us a baseline from which to evaluate student achievement in the sciences and a foundation for a transition to the end of course model as we develop more specific course proficiencies in each discipline;
- These data will also identify school level deficiencies in science education that can shape local curriculum design and instructional practice almost immediately;
- The department will not require that students taking the 2007 HSPA science
  test achieve proficiency in order to graduate; however, the department does
  expect that the biology end of course assessment will become a graduation
  requirement once the Core Curriculum Content Standards are revised to
  include detailed biology standards and specific science course requirements
  are adopted by the State Board;
- As a consequence, the Special Review Assessment (SRA) will not be available in science for those students failing to demonstrate proficiency on the spring 2007 HSPA science assessment;
- In keeping with previously announced plans by the department, the Special Review Assessment (SRA) will be phased out in all content areas over the next several years;
- The March 2007 HSPA science results, like those for language arts literacy and mathematics, will be used for state accountability purposes, through the New Jersey Quality Single Accountability Continuum (NJQSAC); thus, districts should make every effort to ensure that their students are motivated and prepared to do their best on the March 2007 HSPA, in all content areas;
- The large pool of HSPA science test items will be available for future use in end of course assessments in biology and the other disciplines;
- We shall develop an end of course biology assessment based on the life sciences standards to be administered in Spring 2008 to all high school students completing a biology course in the 2007-2008 school year;

- At present, approximately 70 percent of New Jersey districts require students to take biology; in light of the department's planned recommendations to the State Board, districts not currently requiring biology are advised to adopt the requirement that all students take biology no later than the eleventh-grade year;
- The department will continue its high school redesign initiative, already begun, emphasizing greater rigor in content standards and in student achievement, as well as specific course requirements in all content areas to prepare our students fully for the challenges and opportunities that await them after graduation.

Assessment is a means toward an end, not an end in itself: thus, it is fully appropriate that as our consultations with field educators, stakeholders, and colleagues from other states help us refine our understanding of our needs and goals, New Jersey's statewide assessments should evolve to serve those purposes. Further details about our transition to an end of course science assessment model will be disseminated in the coming months. Should you have any questions in the meantime, please contact Dr. Jay Doolan, acting assistant commissioner, Division of Educational Programs and Assessment, at 609-292-1083 or by e-mail at jay.doolan@doe.state.nj.us.

## LED.JD.BDR.TP

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